

### AMENDMENTS TO THE CLAIMS

Please amend claim 22.

This listing of claims will replace all versions, and listings, of claims in the application.

#### Listing of Claims

1-21. (Canceled)

22. (Currently amended) A method for *in vivo* detection of *H. pylori* the method comprising:

inserting an autonomous *in vivo* sensing device into an upper gastrointestinal tract of a patient, said device comprising:

a pH-sensitive color-changing material placed on a device's an optical window of the device, and

a magnetic element disposed within said device;

moving the autonomous *in vivo* device to contact at least one location of the upper gastrointestinal tract by an external magnetic field which moves said magnetic element;

sensing pH at the location of the upper gastrointestinal tract using said pH-sensitive color-changing material;

processing pH data sensed to determine presence of *H. pylori*; and

transmitting pH data to an external receiving unit.

23. (Original) The method according to claim 22, further comprising indicating a pH value which is about equal to or exceeds a predetermined threshold.

24. (Original) The method according to claim 22, wherein sensing pH is by imaging a color changing pH indicator.

25. (Previously Presented) The method according to claim 23, wherein the pH value is about 5.5.

26-29. (Canceled)

30. (Previously Presented) The method according to claim 22, further comprising imaging the gastrointestinal tract using said autonomous *in vivo* device.

31. (Previously Presented) The method according to claim 30, wherein the step of transmitting pH data further comprises transmitting image data.

32. (Previously Presented) The method according to claim 22, further comprising ingesting urea into said patient prior to inserting the autonomous *in vivo* device.

33. (Previously Presented) The method according to claim 22, further comprising the step of indicating a pH change which is about equal to or exceeds a predetermined threshold.

34-35. (Canceled)

36. (Previously Presented) A method according to claim 22, wherein transmitting is by radio frequency.

37. (New) The method according to claim 22, wherein the step of moving comprises moving the capsule in a continuous track along the stomach wall.